average of all winds. During the dry season a much higher rain probability is presented by the south to west-northwest winds, evidently because atmospheric disturbances are accompanied by these winds.

Table 15.-Wind direction and rain.

| 1906.  | V            | Vet months    | ٠.          | Dry months. |        |             |
|--|--------------|---------------|-------------|-------------|--------|-------------|
| Regardless of wind directions, rain hours, per cent of all hours |              | 14. 7         |             |             |        |             |
| Group of winds   | NW to<br>NE. | ENE to<br>SSE | S to<br>WNW | NW to<br>NE | ENE to | S to<br>WNW |
| Winds, per cent of all winds                                     | 14.0         | 58.6          | 25. 6       | 6.3         | 89.6   | 2.2         |
| Rain hours, per cent of all                                      | 16.8         | 53. 2         | 23. 2       | 6.8         | 87.5   | 4.4         |
| Rain hours, per cent of all hours of the special wind group      | 17.6         | 13.3          | 13.3        | 11.9        | 10.6   | 21.6        |

The northwest to northeast winds change remarkably from one season to the other. During the wet season they are the rain-bringing winds as they come from the high seas; but during the dry season they are dry and therefore seem in fact to be trade winds which are shifted by the sea breeze and come from the north.

## WEATHER NOTES FROM PUERTO PLATA, DOMINICAN REPUBLIC.

By R.J. TOTTEN, U. S. Consul. Dated Puerto Plata, D. R., August 14, 1909.

The Tacajo Cacao and Sugar Company, whose banana plantation lies at Sosua in the province of Puerto Plata, has published from time to time a series of weather notes. From these notes the following summary for the fiscal year, July 1, 1908–June 30, 1909, has been compiled.

The total rainfall for this period was 110 inches, distributed as follows:

Table 1.—Monthly rainfall at Puerto Plata, D. R., 1908-9.

| 1908. |  | 1909.                                 |  |
|-------|--|---------------------------------------|--|
| July  | Inches. 6.75 1.45 19.75 6.90 12.90 13.85 | January February March April May June | Inches.<br>20. 90<br>8. 35<br>1. 85<br>1. 35<br>8. 05<br>7. 90 |

The average monthly rainfall was 9.16 inches. The heaviest rainfall registered in any one day was 9.10 inches on September 10, 1908.

The highest temperature recorded during this period was 94° F., on July 12, 1908, the lowest was 62°, on January 19, 1909. The maximum and minimum temperatures recorded in each month follow:

Table 2.—Monthly temperature extremes at Puerto Plata, D. R., 1908-9.

| 1908. | Max.                              | Min.                                    | 1909.                                 | Max.                                    | Min.                                    |
|-------|-----------------------------------|---|---------------------------------------|---|---|
| July  | °F.<br>94<br>93<br>92<br>86<br>85 | °F.<br>77<br>80<br>73<br>78<br>76<br>72 | January February March April May June | °F.<br>81<br>80<br>86<br>86<br>87<br>87 | °F.<br>62<br>70<br>71<br>74<br>74<br>70 |

The average mean temperature for the year was 79° F.

The prevailing winds are east-northeast and are commonly known as "Local Trades." Average velocity of wind 6 miles per hour.

The highest recorded barometer reading was 30.45 inches, the lowest was 28.25 inches.

## CHANGES IN THE MONTHLY WEATHER REVIEW.

In the issues of the Monthly Weather Review for February and March, 1909, we published in full all the pertinent parts of orders issued by the Chief of the U. S. Weather Bureau, outlining changes which he planned to make in the character of the Review beginning with the issue for July, 1909. At the beginning of the announcement in the issue for February the following statement was made:

It appears from the following that those readers particularly interested in *climatological statistics* should request that the Review be continued to their addresses; those who are more interested in theoretical and technical discussions of data should request that the Mount Weather Bulletin be sent them in place of the MONTHLY WEATHER REVIEW.

It appears that there are many who have not read these notices and outlines of prospective changes, and the Weather Bureau is still frequently requested to renew or add to its subscription list recipients who apparently do not realize the character of the new publications.

Our readers are therefore informed that beginning with the issue for July, 1909, the Monthly Weather Review will be restricted to statistical tables of general climatological data for the whole of the United States. The relatively small amount of accompanying text will summarize the weather conditions of the month in the different districts. It is thus evident that hereafter the Review will be of value only to those advanced students of climates, engineers, etc., who need detailed data for their own discussion.

Few papers of general interest to teachers, except as related to climatology, will be published in the Monthly Weather Review, and it is not probable that the publication will be of value to those public schools and high schools that have been receiving it heretofore. These circles of readers must now turn to the editors of already existing journals to supply their needs along those lines formerly met, perhaps, by articles in the Monthly Weather Review.

We may here also take the opportunity to remark that the scope of the articles appearing in the Mount Weather Bulletin will be limited to technical treatments of subjects of advanced research. This will make most of the articles of that publication also beyond the comprehension of the average pupil of the above grades of schools, and make the Bulletin only appropriate for the libraries of colleges and universities.—

G. A.

## TORNADOES IN MISSOURI.

On April 29 a very destructive tornado passed through Golden, Barry County, killing nineteen or twenty persons and injuring about eighteen others. Property amounting to nearly \$20,000 was destroyed within the village and probably as much more along the route of the storm northeastward to Viola, Stone County, where two or three persons were killed and nine seriously hurt. A number of citizens saw the approaching storm and describe it as resembling the smoke of a railway engine. It was not accompanied by rain or hail. Nearly all the trees blown down by the tornado fell in the direction whence it came, the trees to the southwest being badly battered and bruised as usual. Chickens were picked of their feathers and some were torn to pieces. It is reported that the large amount of atmospheric electricity present increased the difficulties of telephoning to Golden.

Another tornado visited Alton, Oregon County, on this same date, destroying most of the buildings of the town and killing six persons.— $C.\ A.,\ jr.$ 

## TORNADO AT ANNISTON, ALA.

By W. F. CLARK, Assistant Observer. Dated Anniston, Ala., May 8, 1909.

On April 13, 1909, at about 3 a. m., a small tornado traversed Calhoun County, Ala., from southwest to northeast, passing